

**On breeding experiments with *Cysticercus tenuicellus* Rud. from Sheep, and their development into mature *Taenia marginata* Batsch in the South African Jackal.**

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At post-mortems of sheep made last year at the Bacteriological Laboratory at Daspoort, the presence of *Cysticerci* much resembling *Cysticercus tenuicollis* Rud. was found with great regularity in most animals examined, and it was considered desirable to settle the question which species they really belong to.

By the kindness of Dr. Gunning, a jackal from the Zoological Gardens was placed at my disposal on October 30th, 1907, to serve as host in experiments to be made with the worms. The animal was dosed with arecolin and calomel. No signs of a previous infection were then observed.

The first two *Cysticerci* were given to the jackal on 4th November, 1907, a further one being administered 9th November, 1907, and a last one 11th November, 1907. The jackal taking them either wrapped in meat or free. I am indebted to the kindness of Dr. Theiler, the Transvaal Government Bacteriologist for the *Cysticerci*.

Three months after the first infection, on 3rd February, 1908, the jackal was slaughtered, and a post-mortem made; two mature specimens of *Taenia marginata* Batsch being found, besides a number of specimens of a *Dipylidium*.

The worms agree in every detail with the descriptions as given in the text-books, except that they are somewhat shorter than would be normal.

However, the number of hooks, size of ova, number of diverticula of the uterus, etc., and the projection of the hind-edge of the proglottids are all as in normal specimens.

An earlier experiment with *C. tenuicollis* was made with a bladderworm taken from a Thar, on 15th August, 1907, and fed to a jackal, the host being slaughtered 20th October, 1907. The worm in this case was not quite mature when taken from the host.

I have also observed the worms in a jackal from the Zoological Gardens, which had not been experimented with.

*Cysticercus tenuicollis* *Eud.* occurs in wild ruminants in South Africa ; on 29th October, 1906, I found 26 specimens in a duiker, *Cephalophus grimmi* (*L.*), which died in the Zoological Gardens, Pretoria.

It is interesting to note that this animal can, in South Africa, pass through its complete life circle within wild animals.

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